REMARKS

I. Introduction

Following entry of the present amendment, claims 15 - 36 are canceled, and claims 1 - 14, 37, and 38 are pending.

Claims 1 - 14, 37 and 38 are finally rejected.

II. Rejections Under 35 U.S.C. § 102(b)

Claims 1-4, 10-12, and 37 are rejected under 35 USC 102(b) as being anticipated by Morris et al. (US Patent Publication 2001/0014442). The Examiner asserts that Morris teaches a consumable product comprising an effective amount of a directly available amino acid selected from tyrosine, phenylalanine, and mixtures thereof. The effective amount of directly available tyrosine may be at least approximately 0.05% or 0.10% by weight (paragraphs [0019] and [0021]).

Applicants respectfully traverse the rejection, as Morris et al. does not teach or suggest all of the limitations of the present claims.

Morris et al. discloses a consumable product, e.g., for cats and dogs, which contains tyrosine in amounts of at least approximately 0.05% or 0.10%.[1] On the other hand, Applicants' claims recite an amount of tyrosine from near nil to at most about 0.4%.

In the Examiner's response to the Applicant's arguments, the Examiner maintains that Morris discloses a range of at least approximately 0.05% or 0.1%, and that such a disclosure is between 75% to 87.5% of the range recited in claim 1. January 24, 2008 Office Action, page 6. It is the Examiner's position that the wide overlap reads on sufficient

[1] Morris et al. also discloses tyrosine in amounts from 0.50% to 3% (see paragraph [0024]); however, these amounts are clearly beyond the limitations as presently claimed.

specificity as required by MPEP § 2131.03 to anticipate the present amounts. Applicants respectfully submit that the Examiner has applied an incorrect standard.

"Prior art which teaches a range overlapping or touching the claimed range anticipates if the prior art range discloses the claimed range with 'sufficient specificity.'" MPEP § 2131.03(II), 8th ed., rev. 6, 6 Sept 2007. The Examiner has compared the overlap (between the presently claimed amounts and the range disclosed by Morris et al.) with the amount of tyrosine presently claimed to arrive at a figure of 75% to 87.5% overlap. Applicants respectfully submit that the Examiner should be comparing the overlap with the range disclosed in Morris et al., as specified at MPEP § 2131.03(II).

Morris et al. discloses a broad range of *at least* 0.05%. As the range does not contain an upper limit, the range is arguably approximately 0.05% to 100% tyrosine. Morris et al. also discloses a narrower range (though still broad when compared to the range presently claimed) of *at least* approximately 0.10%, but fails to disclose an upper limit. Identical to the Examiner's calculations in arriving at the amounts overlapping (as Morris et al. discloses a range of at least approximately 0.05% or 0.10%, and the present claims are limited to an amount not to exceed 0.4%), the ranges overlap by either 0.35% or 0.3%. However, when comparing the overlap with the range *disclosed by Morris et al.*, it can be seen that the overlap constitutes a mere 0.35% or 0.30% of the range as disclosed by Morris et al.

As the presently claimed amounts are a mere 0.35% or 0.30% of the range disclosed by Morris et al., it cannot be said that Morris et al. discloses the claimed amounts with

sufficient specificity. The ranges disclosed by Morris et al. are simply too broad to support a conclusion that the presently claimed amounts are anticipated.

As Morris et al. does not disclose or suggest the narrow range of tyrosine concentration in claims 1 and 37 with sufficient specificity, Applicants respectfully submit that the rejection of these claims is improper and should be withdrawn. As Morris et al. fails to disclose all the limitations of claims 1 and 37, it also fails to disclose every limitation of claims that depend therefrom. Accordingly, Applicants respectfully request that the rejection of claims 2 - 3, and 10 - 12 also be withdrawn.

II. Rejections Under 35 U.S.C. § 103(a)

Claims 1 - 14, 38 and 38 remain rejected under 35 USC 103(a) as being unpatentable over Morris et al. in view of Gerth et al. (US 5,925,377), and further in view of Nagaoka et al., Effects of Excess Dietary Tyrosine on Cholesterol, Bile Acid Metabolism and Mixed-Function Oxidase System in Rats, *J. Nutr.* 1990 Oct;120(10):1134-9.

The Examiner asserts that Morris et al. teaches compositions with the amount of tyrosine which overlap the amounts as presently claimed by 75% to 87.5%. Gerth et al. teaches dietary supplements wherein phenylalanine is combined with tyrosine to act as an appetite depressant. The Examiner believes that it would have been obvious to combine the teachings of Morris et al. and Gerth et al. to control obesity problems in animals, and thus practice the claimed invention. However, neither references teach why one of skill in the art would be motivated to lower the amounts of tyrosine. The Examiner cites Nagaoka

et al. for the proposition that excess dietary tyrosine causes hypercholesterolemia, and thus dietary tyrosine should be reduced.

Applicants respectfully traverse this rejection, as a prima facie case of obviousness has not been established over the claims, and request that the rejection be withdrawn.

The obviousness determination requires four kinds of factual inquiries:

(1) the scope and contents of the prior art;

(2) the differences between the prior art and the claims at issue;

(3) the level of ordinary skill in the pertinent art; and

(4) any objective indicia of success such as commercial success, long felt need, and copying.

KSR Int'l. Co., 127 S. Ct. at 1735 (citing Graham v. John Deere Co., 383 US 1, 17-18 (1966)). The Supreme Court in KSR recognized that a showing of "teaching, suggestion, or motivation" to combine prior art could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 USC 103(a). Id. at 1741. The Supreme Court specifically stated that "it will be necessary . . . to determine whether there was an apparent reason to combine [or modify] the known elements [in the prior art] in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit." Id. at 1740 - 41 (emphasis added).

A. The scope and content of the Prior Art and Differences Between the Prior Art and Claimed Invention:

The present invention is directed to edible compositions comprising tyrosine in an amount not to exceed about 0.4% by weight on a dry matter basis. The compositions may be an animal supplement, animal snack or animal treat, and may be used for reducing the body weight of an animal.

The disclosure of Morris et al. was previously discussed. Morris et al. fails to teach or suggest any compositions comprising tyrosine in an amount not to exceed about 0.4%.

Gerth et al. discloses a dietary supplement that can contain tyrosine and teaches that tyrosine in combination with phenylalanine may assist appetite and weight control. Gerth et al. fails to teach or suggest any composition comprising tyrosine in an amount not to exceed about 0.4%.

Nagaoka et al. discloses that excess dietary tyrosine can result in increased serum cholesterol. Nagaoka et al. fails to teach or suggest any compositions comprising tyrosine in an amount not to exceed 0.4%.

B. The Obviousness Determination:

1. *The references fail to disclose or suggest all of the claim limitations, either alone or in combination.*

The cited references simply fail to teach or disclose any compositions comprising tyrosine in an amount not to exceed about 0.4%. The range of tyrosine disclosed in Morris et al. simply does not suggest the amounts as presently claimed. The amounts of tyrosine in disclosed in Gerth et al. simply does not suggest any compositions comprising tyrosine

in amounts less than 0.4%. Nagaoka et al. fails to teach or suggest amounts of tyrosine as presently claimed.

2 *There is no reasonable expectation of success or motivation in practicing the claimed invention based on the disclosure of Morris et al., Gerth et al. and Nagaoka et al.*

One of ordinary skill in the art would not be motivated or have a reasonable expectation of success of practicing the claimed invention unless they recognized that compositions containing no more than 0.4% tyrosine are effective in reducing body weight. Morris et al. and Gerth et al. teach levels of tyrosine that are in far excess than the amounts presently claimed, thereby teaching away from the levels of tyrosine in the present invention. Morris et al. discloses compositions comprising *at least* approximately 0.5% or 0.10% tyrosine, and gives no upper limit for tyrosine content. Indeed, the present invention is directed to limiting the amounts of tyrosine. The only tyrosine-containing compositions disclosed by Gerth et al. contain *ca.* 13% tyrosine, which is well beyond the amounts as presently claimed. Given the very large percentages of tyrosine disclosed and suggested in Morris et al. and Gerth et al., one of skill in the art would not be motivated to develop compositions with tyrosine levels as low as 0.4%.

Nagaoka et al., which the Examiner asserts would motivate one of skill in the art to reduce excess dietary tyrosine, provides no guidance or motivation as to what amounts of tyrosine are desirable, other than to suggest that excess amounts of tyrosine are to be avoided. Thus, it may be argued that Nagaoka et al. cannot be combined with Morris et al. or Gerth et al. because those compositions, in the case of Morris et al., *may* contain

excess dietary tyrosine, and in the case of Gerth et al, actually contains excess dietary tyrosine. The Examiner states Nagaoka et al. does not specify that the amount of tyrosine used should not exceed the ranges presently claimed; however, the amount of a specific ingredient in a composition is an effective parameter that one of skill in the art would routinely optimize, and optimization is a routine practice to one of ordinary skill in the art. However, Nagaoka et al. is limited to the dietary effects of *excess* tyrosine, and does not teach or suggest any benefit to limiting amounts of tyrosine to levels *less than* excess amounts.

3. *Conclusion*

It is clear that the present claims are not obvious over Morris et al. in view of Gerth et al., and Nagaoka et al. The differences between the present invention and the prior art relied upon are dramatic that the references do not disclose or suggest all the limitations individually, or in combination; furthermore, there is no motivation or reasonable expectation of success in practicing the claimed invention based on the disclosures. As the rejection under 35 USC 103(a) is improper, Applicants respectfully request that it be withdrawn.

IV. Summary

Based on the foregoing amendments and remarks, Applicants respectfully submit that the claims are now in condition for allowance, which allowance is earnestly solicited. If, in the opinion of the Examiner, a telephone conference will advance prosecution of the Application, the Examiner is invited to telephone the undersigned attorney.

It is believed no fees are presently required. If any fee is required, please charge the same to Deposit Account 03-2455

Respectfully Submitted,

Date: March 6, 2008

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